

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A ticket management system including a terminal device and a ticket management server, the terminal device comprising:

~~an electronic value storage unit storing an electronic value;~~

a reading unit for reading an electronic value stored in a storage unit, the electronic value being electronically represented value information;

~~an acquisition unit operable to acquire~~for acquiring, from a ticket to which non-updatable value information is assigned, identification information which identifies the ticket;

~~a transmission unit operable to transmit~~for transmitting an electronization request ~~including that is a request to convert the non-updatable value information into another electronic value and includes~~ the acquired identification information, to the ticket management server; and

~~a value update unit operable to update~~for updating the electronic value stored in the ~~electronic value storage unit, by adding an electronic value shown by~~so as to show value information calculated based on the non-updatable value information assigned to the ticket identified by corresponding to the identification information and the value information shown by the electronic value stored in the storage unit, and

the ticket management server comprising:

a status storage unit for storing the identification information and status information showing whether the ticket identified by the identification information has been electronized, in correspondence with each other;

a reception unit ~~operable to receive~~for receiving the electronization request from the terminal device; and

a change unit ~~operable to~~, when the status information corresponding to the identification information included in the electronization request shows that the ticket has not been electronized, ~~change~~ for changing the status information to show that the ticket has been electronized.

2. (Currently Amended) A terminal device for converting a ticket to which non-updatable value information is assigned into an electronic value, and being used with a

ticket management server which manages electronization of the ticket identified by identification information, the terminal device comprising:

~~an electronic value storage unit storing the electronic value;~~

a reading unit for reading an electronic value stored in a storage unit, the electronic value being electrically represented value information;

an acquisition unit ~~operable to acquire~~for acquiring the identification information which identifies the ticket, from the ticket;

a transmission unit ~~operable to transmit~~for transmitting an electronization request ~~including that is a request to convert the non-updatable value information into an electronic value and includes~~ the acquired identification information, to the ticket management server; and

a value update unit ~~operable to update~~for updating the electronic value stored in the ~~electronic value storage unit, by adding an electronic value shown by~~ so as to show value information calculated based on the non-updatable value information assigned to the ticket identified by corresponding to the identification information and the value information shown by the electronic value stored in the storage unit.

3. (Currently Amended) The terminal device of Claim 2, wherein the value update unit ~~includes~~comprises:

a write judgment unit ~~operable to judge~~for judging whether the ticket identified by the acquired identification information is valid;

a value acquisition unit ~~operable to, when the ticket is judged as valid, acquire for acquiring the another~~ electronic value shown by the non-updatable value information ~~assigned to the ticket~~when the ticket is valid; and

a value ~~update~~updating unit ~~operable to update~~for updating the electronic value stored in the ~~electronic value storage unit, by adding to an electronic value calculated based on~~ the acquired other electronic value and the electronic value stored in the storage unit.

4. (Currently Amended) The terminal device of Claim 3, wherein the write judgment unit ~~includes~~comprises:

a receiving unit ~~operable to receive~~for receiving electronization information, showing whether the ticket identified by the identification information has been electronized, from the ticket management server; and

a determination unit ~~operable to,~~ for determining the ticket as valid when the electronization information shows that the ticket has not been electronized, ~~determine the ticket as valid.~~

5. (Currently Amended) The terminal device of Claim 3, wherein judgment information based on the identification information is stored on the ticket, and the write judgment unit ~~includes~~comprises:

a judgment information acquisition unit ~~operable to acquire~~for acquiring the judgment information; and

a determination unit ~~operable to,~~ for determining the ticket as valid when the identification information coincides with the judgment information, ~~determine the ticket as valid.~~

6. (Original) The terminal device of Claim 5, wherein the judgment information is stored on the ticket in a bar code format, and the judgment information acquisition unit acquires the judgment information stored in the bar code format.

7. (Currently Amended) The terminal device of Claim 3, wherein the value acquisition unit includes:

a request unit ~~operable to, when the ticket is judged as valid, request for~~ requesting the ticket management server to notify the non-updatable value information ~~assigned to the ticket by transmitting a notification request- including the identification information~~ when the ticket is judged as valid,; and

a response acquisition unit ~~operable to receive~~for receiving, as a response to the notification request, the non-updatable value information from the ticket management server, and ~~acquire~~acquiring the other electronic value shown by the non-updatable value information.

8. (Currently Amended) The terminal device of Claim 3, wherein the identification information includes the non-updatable value information ~~assigned to the ticket~~, and the value acquisition unit, when the ticket is judged as valid, extracts the non-updatable value information from the identification information, and acquires the other electronic value shown by the non-updatable value information.

9. (Currently Amended) The terminal device of Claim 2, wherein the ticket includes a storage device storing the identification information ~~which identifies the ticket~~, and the acquisition unit acquires the identification information stored ~~on~~ in the storage device.

10. (Currently Amended) The terminal device of Claim 9, wherein the storage device is an ~~IC~~ integrated circuit tag storing the identification information, and the acquisition unit acquires the identification information stored ~~on~~ in the ~~IC~~ integrated circuit tag.

11. (Original) The terminal device of Claim 2, wherein the identification information is stored on the ticket in a bar code format, and the acquisition unit acquires the identification information stored in the bar code format.

12. (Currently Amended) ~~The A terminal device of Claim 2 further comprising that is used with a ticket management server which manages a status of a ticket to which non-updatable value information is assigned, the terminal device comprising:~~

an invalidation identification acquisition unit ~~operable to acquire~~ for acquiring identification information which identifies an invalid ticket;

an invalid value acquisition unit ~~operable to acquire~~ for acquiring an invalid value ~~that is an electronic value shown by~~, the invalid value being an electronic value that is electronically represented non-updatable value information assigned to the invalid ticket ~~identified by the acquired identification information;~~

a balance judgment unit ~~operable to judge~~ for judging whether the invalid value is no more than ~~the another~~ an electronic value stored in ~~the a electronic value~~ storage unit;

a validation request transmission unit ~~operable to,~~ for transmitting a validation request of the ticket to the ticket management server when the invalid value is judged as

no more than the other electronic value stored in the ~~electronic value~~ storage unit;
~~transmit a validation request of the ticket to the ticket management server;~~

an authorization reception unit ~~operable to receive~~ for receiving authorization information for authorizing ~~to validate~~ validation of the ticket from the ticket management server; and

a subtraction unit ~~operable to, when the authorization information is received,~~
~~subtract~~ for subtracting the invalid value from the other electronic value stored in the ~~electronic value~~ storage unit when the authorization information is received.

13. (Currently Amended) The terminal device of Claim 2-12 further comprising:
~~realized by a communication device and a storage medium, wherein the communication device includes the acquisition unit, the transmission unit, and the value update unit, and the storage medium includes the electronic value storage unit.~~

a reading unit for reading the other electronic value stored in the storage unit;

an acquisition unit for acquiring identification information which identifies the ticket, from the ticket;

a transmission unit for transmitting an electronization request that is a request to convert the non-updatable value information into an electronic value and includes the acquired identification information, to the ticket management server; and

a value update unit for updating the other electronic value stored in the storage unit so as to show value information calculated based on the non-updatable value information and the value information shown by the electronic value stored in the storage unit.

14-15. (Cancelled)

16. (Currently Amended) ~~The A~~ ticket management server of Claim 14 further comprising: which manages a status of a ticket to which non-updatable value information is assigned, the ticket management server comprising:

a status storage unit storing identification information which identifies the ticket and status information showing whether the ticket identified by the identification

information has been electronized, in correspondence with each other;

a validation request receiving unit ~~operable to receive~~for receiving a ticket validation request including identification information of an invalid ticket from ~~the a~~ terminal device;

an electronization judgment unit ~~operable to judge~~for judging whether status information corresponding to the identification information included in the validation request shows that the ticket has been electronized;

a ticket validation unit ~~operable to, when the status information shows that the ticket has been electronized, change~~ for changing the status information to show that the ticket has not been electronized when the status information shows that the ticket has been electronized; and

an authorization transmission unit ~~operable to, when the status information shows that the ticket has been electronized, transmit~~ for transmitting authorization information showing authorization to validate the ticket to the terminal device when the status information shows that the ticket has been electronized.

17. (Currently Amended) A register device for adjusting a payment amount, and being used with a ticket management server which manages validity of a money ticket and a terminal device, the register device comprising:

a calculation unit ~~operable to calculate~~for calculating the payment amount;

a holding unit ~~operable to hold~~for holding a money ticket ~~ID-identification~~ for identifying the money ticket and amount information showing an amount of the money ticket, in correspondence with each other;

an acquisition unit ~~operable to acquire~~for acquiring, from an ~~IC-integrated circuit~~ tag attached to the money ticket, the money ticket ~~ID-identification~~ for identifying the money ticket;

an inquiry unit ~~operable to inquire~~for inquiring of the ticket management server whether the acquired money ticket ~~ID-identification~~ is valid;

a receiving unit ~~operable to receive~~for receiving a response showing whether the money ticket identified by the acquired money ticket ~~ID-identification~~ is valid, from the ticket management server; and

a charging unit ~~operable to~~, when the response shows that the money ticket is valid, ~~charge for charging~~ the terminal device for an amount after subtracting the amount of the money ticket identified by the acquired the money ticket ~~ID~~ identification from the payment amount.

18. (Currently Amended) A value conversion method used in a terminal device ~~including an electronic value storage unit storing an electronic value and convert that~~ converts a ticket to which non-updatable value information is assigned into an electronic value, the method comprising ~~steps of:~~

reading an electronic value stored in a storage unit, the electronic value being electrically represented value information;

acquiring identification information, which identifies the ticket, from the ticket;

transmitting an electronization request ~~including that is a request to convert the~~ non-updatable value information into an electronic value and includes the acquired identification information, to a ticket management server which manages electronization of the ticket; and

~~updating the electronic value stored in the electronic value storage unit, by adding the electronic value shown by~~ so as to show value information calculated based on the non-updatable value information assigned to the ticket identified by corresponding to the identification information and the value information shown by the electronic value stored in the storage unit.

19. (Currently Amended) A computer program used in a terminal device ~~including an electronic value storage unit storing an electronic value and convert that~~ converts a ticket to which non-updatable value information is assigned into an electronic value, the program comprising ~~steps of:~~

reading an electric value stored in a storage unit, the electronic value being electrically represented value information;

acquiring identification information, which identifies the ticket, from the ticket;

transmitting an electronization request ~~including that is a request to convert the~~ non-updatable value information into an electronic value and includes the acquired

identification information, to a ticket management server which manages electronization of the ticket; and

updating the electronic value ~~stored in the electronic value storage unit, by adding the electronic value shown by~~ so as to show value information calculated based on the non-updatable value information assigned to the ticket identified by corresponding to the identification information and the value information shown by the electronic value stored in the storage unit.

20. (Original) A computer readable storage medium storing the computer program of Claim 19.

21. (New) The ticket management server of claim 16, further comprising:

a reception unit for receiving an electronization request that includes the identification information which identifies the ticket, from the terminal device; and

a change unit for changing the status information corresponding to the identification information stored in the status storage unit, to show that the ticket has been electronized when the ticket identified by the identification information included in the electronization request is valid.

22. (New) The ticket management server of claim 21, wherein the change unit includes:

a judgment unit for judging whether the status information included in the electronization request shows that the ticket has been electronized; and

a changing unit for determining the identification information as valid, and changing the status information to show that the ticket has been electronized when the ticket is judged as not having been electronized.

23. (New) A terminal device for converting a ticket to which non-updatable value information is assigned into an electronic value, and being used with a ticket management server which manages electronization of the ticket identified by identification information, the terminal device comprising:

an electronic value storage unit storing the electronic value;

an acquisition unit for acquiring the identification information which identifies the ticket, from the ticket;

a transmission unit for transmitting an electronization request including the acquired identification information, to the ticket management server;

a value update unit for updating the electronic value stored in the electronic value storage unit, by adding an electronic value shown by the value information assigned to the ticket corresponding to the identification information;

an invalidation identification acquisition unit for acquiring identification information which identifies an invalid ticket;

an invalid value acquisition unit for acquiring an invalid value that is another electronic value shown by value information assigned to the invalid ticket identified by the acquired identification information;

a balance judgment unit for judging whether the invalid value is no more than the electronic value stored in the electronic value storage unit;

a validation request transmission unit, when the invalid value is judged as no more than the electronic value stored in the electronic value storage unit, for transmitting a validation request of the ticket to the ticket management server;

an authorization reception unit for receiving authorization information for authorizing validation of the ticket from the ticket management server; and

a subtraction unit, when the authorization information is received, for subtracting the invalid value from the electronic value stored in the electronic value storage unit.

24. (New) A ticket management server which manages a status of a ticket to which non-updatable value information is assigned, the ticket management server comprising:

a status storage unit storing identification information which identifies the ticket and status information showing whether the ticket identified by the identification information has been electronized, in correspondence with each other;

a reception unit for receiving an electronization request including the identification information of the ticket, from a terminal device;

a change unit for changing, when the ticket identified by the identification information included in the electronization request is valid, the status information

corresponding to the identification information stored in the status storage unit, to show that the ticket has been electronized;

a validation request receiving unit for receiving a ticket validation request including identification information of an invalid ticket from a terminal device;

an electronization judgment unit for judging whether status information corresponding to the identification information included in the validation request shows that the ticket has been electronized;

a ticket validation unit for changing, when the status information shows that the ticket has been electronized, the status information to show that the ticket has not been electronized; and

an authorization transmission unit for transmitting, when the status information shows that the ticket has been electronized, authorization information showing authorization to validate the ticket to the terminal device.